

AMENDMENTS

Amendments to the Claims

Please amend the claims as follows:

1. (Currently Amended) An apparatus for automatically generating a web interface for an MFS-based IMS application, comprising:
 - an import module configured to import MFS-based IMS source files
 - corresponding to an MFS-based IMS application;
 - a metadata generator configured to store a standardized metadata
 - description of the Message Input Description (MID) and Message
 - Output Description (MOD) for the MFS-based IMS application;
 - ~~and~~
 - a code generator configured to generate a middleware application
 - corresponding to the MFS-based IMS application from the
 - standardized metadata description, the middleware application
 - interfacing between a client application and the corresponding
 - MFS-based IMS application[.]; and
 - an interface configured to execute the import module, the metadata
 - generator, and the code generator in response to a parameter set
 - provided as a single input to the interface.
2. (Original) The apparatus of claim 1, wherein the standardized metadata description comprises an eXtended Markup Language Metadata Interchange (XMI) file.
3. (Canceled).

4. (Currently Amended) The apparatus of claim [[3]] 1, further comprising a loader configured to load a script comprising the parameter set from persistent storage.
5. (Original) The apparatus of claim 4, wherein the script comprises a plurality of parameter sets each associated with a different MFS-based IMS application.
6. (Currently Amended) The apparatus of claim [[3]] 1, wherein the parameter set is manually entered, the apparatus further comprising a storage module configured to store the manually entered parameter set for subsequent automated use.
7. (Currently Amended) The apparatus of claim [[3]] 1, wherein the command-line interface comprises a plurality of modes, each mode comprising a different level of user interaction.
8. (Original) The apparatus of claim 7, wherein one mode comprises a batch mode that reads the parameter set from persistent storage.
9. (Original) The apparatus of claim 1, further comprising an error module configured to present an error message in response to an error condition triggered by the import module, the metadata generator, or the code generator.
10. (Original) The apparatus of claim 1, wherein the import module is configured to import a plurality of MFS-based IMS source files in response to a single parameter.

11. (Original) The apparatus of claim 1, further comprising a deployment module configured to store the standardized metadata descriptions and middleware application in one or more repositories.

12. (Original) An apparatus for automatically generating a web interface for an MFS-based IMS application, comprising:
- a metadata generator configured to generate at least one eXtended Markup Language Metadata Interchange (XMI) file that stores the Message Input Description (MID) and Message Output Description (MOD) associated with a MFS-based IMS application installed on a host;
 - a code generator configured to generate a middleware application for the MFS-based IMS application, the middleware application configured to interface between a client application and the corresponding MFS-based IMS application; and
 - a command-line interface configured to execute the metadata generator and the code generator in response to a parameter set.
13. (Original) The apparatus of claim 12, further comprising a loader configured to load a script comprising the parameter set from persistent storage.
14. (Original) The apparatus of claim 12, wherein the parameter set is provided as a single input to the command-line interface.
15. (Original) The apparatus of claim 12, wherein the middleware application comprises a server component and a back-end component.
16. (Original) The apparatus of claim 12, wherein the command-line interface comprises a plurality of modes, each mode involving a different level of user interaction.

17. (Original) The apparatus of claim 12, wherein one mode prompts a user for each parameter of the parameter set.

18. (Original) The apparatus of claim 12, wherein the command-line interface is configured to be executed by a separate software module.

19. (Original) The apparatus of claim 12, further comprising a deployment module configured to store the XMI files and middleware application in one or more repositories.

20. (Currently Amended) A utility for automatically generating a web interface for an MFS-based IMS application, comprising:

- an import module configured to import MFS-based IMS source files corresponding to an MFS-based IMS application;
- a parser configured to parse each of the MFS-based IMS source files into one or more Message Input Description (MIDs) and one or more Message Output Description (MODs);
- a metadata generator configured to store at least one eXtended Markup Language Metadata Interchange (XMI) file for the MIDs and MODs of the MFS-based IMS application;
- a code generator configured to generate a middleware application corresponding to the MFS-based IMS application from the standardized metadata description, the middleware application interfacing between a client application and the corresponding MFS-based IMS application; ~~and~~
- a deployment module configured to deploy the XMI files and middleware application to one or more servers configured to enable communication between the client application and the MFS-based IMS application[[.]]; and
- an interface configured to receive a parameter set and provide feedback regarding automatic generation of the web interface, the parameter set provided as a single input to the interface.

21. (Canceled).
22. (Currently Amended) The utility of claim ~~[[21]] 20~~, further comprising a loader configured to load a script comprising the parameter set from persistent storage.
23. (Original) The utility of claim 22, wherein the script comprises a plurality of parameter sets each associated with a different MFS-based IMS application.
24. (Currently Amended) The utility of claim ~~[[21]] 20~~, wherein the parameter set is manually entered, the apparatus further comprising a storage module configured to store the manually entered parameter set.
25. (Currently Amended) The utility of claim ~~[[21]] 20~~, wherein the command-line interface comprises a plurality of modes, each mode comprising a different level of user interaction.
26. (Original) The utility of claim 25, wherein one mode comprises a batch mode that reads the parameter set from persistent storage.
27. (Original) The utility of claim 20, further comprising an error module configured to present an error message in response to an error condition triggered by the import module, the metadata generator, or the code generator.
28. (Original) The utility of claim 20, wherein the import module is configured to import a plurality of MFS-based IMS source files in response to a single parameter.

29. (Currently Amended) A method for automatically generating a web interface for an MFS-based IMS application, comprising:
- a command-line interface accepting a parameter set provided as a single input;
 - importing MFS-based IMS source files corresponding to an MFS-based IMS application;
 - generating at least one eXtended Markup Language Metadata Interchange (XMI) file for the MFS-based IMS application associated with the imported MFS-based IMS source files; and
 - generating a middleware application from the at least one XMI file, the middleware application configured to interface between a client application and the MFS-based IMS application.
30. (Canceled).
31. (Original) The method of claim ~~[[30]]~~ 29, further comprising loading a script comprising the parameter set from persistent storage.
32. (Original) The method of claim 31, wherein the script comprises a plurality of parameter sets each associated with a different MFS-based IMS application.
33. (Original) The method of claim ~~[[30]]~~ 29, wherein the parameter set is manually entered, the method further comprising storing the manually entered parameter set.

34. (Original) The method of claim ~~[[30]]~~ 29, wherein the command-line interface comprises a plurality of modes, each mode comprising a different level of user interaction.

35. (Original) The method of claim 34, wherein one mode comprises a batch mode that reads the parameter set from persistent storage.

36. (Original) The method of claim 29, further comprising presenting an error message in response to an error condition triggered when generating the at least one XMI file.

37. (Original) The method of claim 29, wherein importing comprises importing a plurality of MFS-based IMS source files from a single directory in response to a single parameter.

38. (Original) The method of claim 29, further comprising deploying the at least one XMI file and middleware application to servers configured to enable transactional communication between the client application and the MFS-based IMS application.

39. (Currently Amended) An apparatus for automatically generating a web interface for an MFS-based IMS application, comprising:

- means for accepting a parameter set provided as a single input;
- means for importing MFS-based IMS source files corresponding to an MFS-based IMS application;
- means for generating at least one eXtended Markup Language Metadata Interchange (XMI) file for the MFS-based IMS application associated with the imported MFS-based IMS source files; and
- means for generating a middleware application from the at least one XMI file, the middleware application configured to interface between a client application and the MFS-based IMS application.

40. (Currently Amended) An article of manufacture comprising a program storage medium readable by a processor and embodying one or more instructions executable by a processor to perform a method for automatically generating a web interface for an MFS-based IMS application, the method comprising:

accepting a parameter set provided as a single input;

importing MFS-based IMS source files corresponding to an MFS-based IMS application;

generating at least one eXtended Markup Language Metadata Interchange (XMI) file for the MFS-based IMS application associated with the imported MFS-based IMS source files; and

generating a middleware application from the at least one XMI file, the middleware application configured to interface between a client application and the MFS-based IMS application.